AMENDMENTS TO THE SPECIFICATION

Please amend the specification as indicated in the following rewritten paragraphs.

Please delete paragraph **[0508]** and replace it with the following rewritten paragraph:

[0508] A preferred detection method is allele specific hybridization using probes overlapping the polymorphic site and having about 5, 10, 20, 25, or 30 nucleotides around the polymorphic region. Examples of probes for detecting specific allelic variants of the polymorphic region located in intron X are probes comprising a nucleotide sequence set forth in any of SEQ ID NO. X. In a preferred embodiment of the invention, several probes capable of hybridizing specifically to allelic variants are attached to a solid phase support, e.g., a "chip." Oligonucleotides can be bound to a solid support by a variety of processes, including lithography. For example a chip can hold up to 250,000 oligonucleotides (GeneChip, Affymetrix). Mutation detection analysis using these chips comprising oligonucleotides, also termed "DNA probe arrays" is described e.g., in Cronin et al., HUMAN MUTATION 7:244 (1996) and in Kozal et al., NATURE MEDICINE 2:753 (1996). In one embodiment, a chip comprises all the allelic variants of at least one polymorphic region of a gene. The solid phase support is then contacted with a test nucleic acid and hybridization to the specific probes is detected. Accordingly, the identity of numerous allelic variants of one or more genes can be identified in a simple hybridization experiment. For example, the identity of the allelic variant of the nucleotide polymorphism of nucleotide A or G at position 33 of ~~Seq ID 1~~ (baySNP179) and that of other possible polymorphic regions can be determined in a single hybridization experiment.

Please delete paragraph **[0633]** and replace it with the following rewritten paragraph:

Table 2a

OLIGONUCLEOTIDE PRIMERS USED FOR GENOTYPING USING MASS SPECTROMETRY

[0633] The baySNP number refers to an internal numbering of the PA SNPs. Primer sequences are listed for preamplification of the genomic fragments (primers EF and ER) and for subsequent allele specific PCR of the SNP.

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
28	C137T	CF	gggacggtcggtagatTCTAGAATTGTGCTTCCC	1
28	C137T	EF	TGTCCAGTGTTAGGAAAAA	2
28	C137T	ER	GACGATGCCTTCAGCACAGATGTGGCTTCTGTATGAG	3
28	C137T	TF	gctggctcggtcaagaTCTAGAATTGTGCTTCCT	4
29	A464G	AF	gggacggtcggtagatCATCGGTCAGTGTCCCCA	5
29	A464G	EF	GATGTCTGTCTCCTTGATGT	6
29	A464G	ER	GACGATGCCTTCAGCACAATGTGGGGGTTTTATTTT	7
29	A464G	GF	gctggctcggtcaagaCATCGGTCAGTGTCCCCG	8
52	C397G	CR	gggacggtcggtagatTATTTTATAATGCAAAAG	9
52	C397G	EF	GACGATGCCTTCAGCACAGTGAATTGCCAGATTAGTG	10
52	C397G	ER	TCTAAAGTGCTGGGATTG	11
52	C397G	GR	gctggctcggtcaagaTATTTTATAATGCAAAAC	12
56	A429G	AF	gggacggtcggtagatAAGGTCTTTGTACGTGTA	13
56	A429G	EF	CCAGGTACTGCCTTACAAA	14
56	A429G	ER	GACGATGCCTTCAGCACAGCTCCCAAAATAAATCACTC	15
56	A429G	GF	gctggctcggtcaagaAAGGTCTTTGTACGTGTG	16
89	A159G	AR	gggacggtcggtagatTGGAGTCGGGGGAGTCAT	17
89	A159G	EF	GACGATGCCTTCAGCACATAGTTCAAGGGTAAAGGA	18
89	A159G	ER	GAGGACGAGATGTAAGAG	19
89	A159G	GR	gctggctcggtcaagaTGGAGTCGGGGGAGTCAC	20
90	C154T	CF	gggacggtcggtagatCAGCGCATCCTGAACCAC	21
90	C154T	EF	GCTGGAACGAGTTCATCCT	22
90	C154T	ER	GACGATGCCTTCAGCACAGGACCCCACCTTTCTTGT	23
90	C154T	TF	gctggctcggtcaagaCAGCGCATCCTGAACCAT	24
99	C58T	CR	gggacggtcggtagatTCCTGCTCTTTTCTCTAG	25
99	C58T	EF	GACGATGCCTTCAGCACACACTGACTGCTTACTCTACC	26
99	C58T	ER	TACTGTGTCTCAGCTCCA	27

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
99	C58T	TR	gctggctcggtcaagaTCCTGCTCTTTTCTCTAA	28
140	C468T	CR	gggacggtcggtagatGTGAATCCCAATACGAAG	29
140	C468T	EF	GACGATGCCTTCAGCACATAAAAAATAACCAGGTACTCCA	30
140	C468T	ER	GATGAGTCCTTCACCAAACATACA	31
140	C468T	TR	gctggctcggtcaagaGTGAATCCCAATACGAAA	32
152	A587G	AF	gggacggtcggtagatGGTGGGAGGTTCCAGCCA	33
152	A587G	EF	GCAGGAAGAAAGCTAGAA	34
152	A587G	ER	GACGATGCCTTCAGCACAAGGCAGGATAATGACAAC	35
152	A587G	GF	gctggctcggtcaagaGGTGGGAGGTTCCAGCCG	36
214	A209G	AF	gggacggtcggtagatCATTTCCACCTCACCAAA	37
214	A209G	EF	AGGTATTCCCGGCGTTTC	38
214	A209G	ER	GACGATGCCTTCAGCACATGTTGTGCGTCTGCTTCC	39
214	A209G	GF	gctggctcggtcaagaCATTTCCACCTCACCAAG	40
221	C339G	CF	gggacggtcggtagatTGTGAAGAACTGTTGCTC	41
221	C339G	EF	CTGAAGCTCATCTGCCTTCT	42
221	C339G	ER	GACGATGCCTTCAGCACATCCCCTTCCTTCTTACCT	43
221	C339G	GF	gctggctcggtcaagaTGTGAAGAACTGTTGCTG	44
224	C189T	CR	gggacggtcggtagatGCCCGCTTTTCTTCATCG	45
224	C189T	EF	GACGATGCCTTCAGCACACTGTCTTCAAGGGCTTACAC	46
224	C189T	ER	TCCAACTTCAGGCAAAAC	47
224	C189T	TR	gctggctcggtcaagaGCCCGCTTTTCTTCATCA	48
294	C465T	CR	gggacggtcggtagatCCCAAGGCCAACAGGGAG	49
294	C465T	EF	GACGATGCCTTCAGCACAGCATTCTTATGCCAGTGTTC	50
294	C465T	ER	ATCCATCCCATCCTGTGT	51
294	C465T	TR	gctggctcggtcaagaCCCAAGGCCAACAGGGAA	52
307	C215T	CR	gggacggtcggtagatGAGTGGGTGCTGTTCCCG	53
307	C215T	EF	GACGATGCCTTCAGCACAGTTACTGCCTCTCTGACC	54
307	C215T	ER	AGTGTGACCTGCTCTCTT	55
307	C215T	TR	gctggctcggtcaagaGAGTGGGTGCTGTTCCCA	56
411	A369T	ER	gacgatgccttcagcacaAACACATTCCCCCTCTAC	57
411	A369T	EF	GTCTCTATTCCAAGCCAAG	58
411	A369T	AF	gggacggtcggtagatCCCCGCTCCAGCTCCTCA	59
411	A369T	TF	gctggctcggtcaagaCCCCGCTCCAGCTCCTCT	60
449	C323G	CR	gggacggtcggtagatCCGCTTCTGCTTCTGCTG	61

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
449	C323G	EF	GACGATGCCTTCAGCACAAGGAGAAGAGGGAGGAGA	62
449	C323G	ER	GGAGCACGTAAGGAGAAA	63
449	C323G	GR	gctggctcggtcaagaCCGCTTCTGCTTCTGCTC	64
466	C123T	CF	gggacggtcggtagatGGCCAGGGGCTGGAGGGC	65
466	C123T	EF	TCTTCAGTTCTCTCAGCTTC	66
466	C123T	ER	GACGATGCCTTCAGCACATCACTAGGGGCTCTTACC	67
466	C123T	TF	gctggctcggtcaagaGGCCAGGGGCTGGAGGGT	68
472	A497G	AR	gggacggtcggtagatTCCTCCCGCTGCTTCAGT	69
472	A497G	EF	GACGATGCCTTCAGCACATCACTTACCCATCATACTTCTTTTTC	70
472	A497G	ER	AATCCTGCCTCCCACCTT	71
472	A497G	GR	gctggctcggtcaagaTCCTCCCGCTGCTTCAGC	72
542	A402G	AR	gggacggtcggtagatAGAAATTCCCTCCCAACT	73
542	A402G	EF	GACGATGCCTTCAGCACATGATTGAGCCAGTTGTTT	74
542	A402G	ER	GGGGTGTATTTTGAGAGTG	75
542	A402G	GR	gctggctcggtcaagaAGAAATTCCCTCCCAACC	76
739	C87G	CR	gggacggtcggtagatGCTGGTTTGACTGGACGG	77
739	C87G	EF	GACGATGCCTTCAGCACAACCTTGGTATAATCCTTTCC	78
739	C87G	ER	AGGCAACCTAATCCACTT	79
739	C87G	GR	gctggctcggtcaagaGCTGGTTTGACTGGACGC	80
821	A140C	AF	gggacggtcggtagatAGTGCTGTGATACCTGGA	81
821	A140C	CF	gctggctcggtcaagaAGTGCTGTGATACCTGGC	82
821	A140C	EF	ACACCCACAAAACAAGAA	83
821	A140C	ER	GACGATGCCTTCAGCACAGGAACAAGGACATAAAAGAG	84
1005	A257G	AR	gggacggtcggtagatAGGAAATGTTAGCCCTGT	85
1005	A257G	EF	GACGATGCCTTCAGCACACTCCACTTCTCTATGCCTC	86
1005	A257G	ER	GTCCCCAGCTATGTATTGT	87
1005	A257G	GR	gctggctcggtcaagaAGGAAATGTTAGCCCTGC	88
1055	A287T	AF	gggacggtcggtagatCTCAGGGAGGGAGAGAGA	89
1055	A287T	EF	GGGACAGACAGACAGACA	90
1055	A287T	ER	GACGATGCCTTCAGCACACAACTCCTTCTTCAGCAC	91
1055	A287T	TF	gctggctcggtcaagaCTCAGGGAGGGAGAGAGT	92
1056	A354G	AR	gggacggtcggtagatGCGGCTGCCCCGTCCTGT	93
1056	A354G	EF	GACGATGCCTTCAGCACAGTGTGTCTATGTGTCTGTGTG	94
1056	A354G	ER	CGGACTTCTCCTTCTTGT	95

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
1056	A354G	GR	gctggctcggtcaagaGCGGCTGCCCCGTCCTGC	96
1085	A251G	EF	TAGGGTAAGCAGCAAGAG	97
1085	A251G	ER	CACAAGGCAAGAGATAACA	98
1085	A251G	AF	gggacggtcggtagatCAGGCAAGATAGACAGCA	99
1085	A251G	GF	gctggctcggtcaagaCAGGCAAGATAGACAGCG	100
1086	A104G	EF	GTGCCCATACGAACAGAATAG	101
1086	A104G	ER	TGCCAAGTACCCCAAGAG	102
1086	A104G	AR	gggacggtcggtagatCCATTCCTCCCCAGACAT	103
1086	A104G	GR	gctggctcggtcaagaCCATTCCTCCCCAGACAC	104
1092	C1687G	CF	gggacggtcggtagatCGTGCGAGCAGCGAAAGC	105
1092	C1687G	EF	CCAGAGAGAAGTCGAGGAAGAGA	106
1092	C1687G	ER	GACGATGCCTTCAGCACAGTCACCCCCAAAAGCAGG	107
1092	C1687G	GF	gctggctcggtcaagaCGTGCGAGCAGCGAAAGG	108
1096	G454T	EF	GACGATGCCTTCAGCACACTTTTCCTCCTAGCCCAC	109
1096	G454T	ER	AAGTGATGTAACCCTCCTCTC	110
1096	G454T	GR	gggacggtcggtagatTCAGCTATAAATAGGGCC	111
1096	G454T	TR	gctggctcggtcaagaTCAGCTATAAATAGGGCA	112
1101	C249T	CR	gggacggtcggtagatTGATGGCGGGTGCCAAGG	113
1101	C249T	EF	GACGATGCCTTCAGCACAGCTCTTTCCTTTGCTTCC	114
1101	C249T	ER	CACTGGGGGTCCTCTTAC	115
1101	C249T	TR	gctggctcggtcaagaTGATGGCGGGTGCCAAGA	116
1204	A307G	AR	gggacggtcggtagatCAAGGGCACTCACATTAT	117
1204	A307G	EF	GACGATGCCTTCAGCACAGCTCTTGCGTCTGTTTCC	118
1204	A307G	ER	TTTCCCTTCTGTCCCCTT	119
1204	A307G	GR	gctggctcggtcaagaCAAGGGCACTCACATTAC	120
1504	C180T	CF	gggacggtcggtagatGTGACTTTTGGTTCCCAC	121
1504	C180T	EF	AACTCGGGGTCACTGGTCT	122
1504	C180T	ER	GACGATGCCTTCAGCACACAGCGGGTATGGAGGATG	123
1504	C180T	TF	gctggctcggtcaagaGTGACTTTTGGTTCCCAT	124
1511	G153T	EF	ACACCAGTTCTCCCTCCT	125
1511	G153T	ER	GACGATGCCTTCAGCACACCCACCTTTCCTAATCCT	126
1511	G153T	GF	gggacggtcggtagatTTGGGACTCTGCGTCAAG	127
1511	G153T	TF	gctggctcggtcaagaTTGGGACTCTGCGTCAAT	128
1524	A284C	AF	gggacggtcggtagatCTCTCAAAGCCCACACAA	129

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
1524	A284C	CF	gctggctcggtcaagaCTCTCAAAGCCCACACAC	130
1524	A284C	EF	AGAAAAAGAAAAGGAAAAAGA	131
1524	A284C	ER	GACGATGCCTTCAGCACAGGAAAGTTACAAGGCTATGA	132
1556	C367G	CR	gggacggtcggtagatACCTGCCTCTAAGGTCTG	133
1556	C367G	EF	GACGATGCCTTCAGCACAAGGAGAAGACAGTTCAAGG	134
1556	C367G	ER	ACAGTTGCCAGAGAAAAG	135
1556	C367G	GR	gctggctcggtcaagaACCTGCCTCTAAGGTCTC	136
1561	A251C	EF	TCACTTGCCTCTACTCCA	137
1561	A251C	ER	ATACCAGAAAGACTAAGCTCC	138
1561	A251C	AF	gggacggtcggtagatGGGTGAGCTCTGTGGGCA	139
1561	A251C	CF	gctggctcggtcaagaGGGTGAGCTCTGTGGGCC	140
1582	C389T	CR	gggacggtcggtagatCCAAGGGTTATGGCAGGG	141
1582	C389T	EF	GACGATGCCTTCAGCACACCTGACTATTTGGGGTTGTG	142
1582	C389T	ER	ATCGCTCTCTGCTTCTGCT	143
1582	C389T	TR	gctggctcggtcaagaCCAAGGGTTATGGCAGGA	144
1638	A443G	AR	gggacggtcggtagatCCAAAACCCCAGCGCTGT	145
1638	A443G	EF	GACGATGCCTTCAGCACACTCTTTATCCTGCTTATGGT	146
1638	A443G	ER	CCAAGCTCACTCTGTAGG	147
1638	A443G	GR	gctggctcggtcaagaCCAAAACCCCAGCGCTGC	148
1662	C251T	EF	AATACAATGGAAGCCAAG	149
1662	C251T	ER	CCTAATCGAACAGAAAGG	150
1662	C251T	CF	gggacggtcggtagatCCAGTCTCCATCCACTTC	151
1662	C251T	TF	gctggctcggtcaagaCCAGTCTCCATCCACTTT	152
1714	A376G	AF	gggacggtcggtagatTGAACGGCATGACGGGGA	153
1714	A376G	EF	AAGTGTTTCTGCTGTGCCT	154
1714	A376G	ER	GACGATGCCTTCAGCACACAAGTCCTGGTTTTCCATC	155
1714	A376G	GF	gctggctcggtcaagaTGAACGGCATGACGGGGG	156
1722	C89T	CF	gggacggtcggtagatACCCCAGGATGCCCACAC	157
1722	C89T	EF	GTTTATCCTCCTCATGTCC	158
1722	C89T	ER	GACGATGCCTTCAGCACAGTTACCTTTTCCACCTCTC	159
1722	C89T	TF	gctggctcggtcaagaACCCCAGGATGCCCACAT	160
1757	A210G	AF	gggacggtcggtagatGGAAACAAACCAAAATGA	161
1757	A210G	EF	CCAGCACCCAAAATAAGA	162
1757	A210G	ER	GACGATGCCTTCAGCACAATAAGTTGAAGCCCTCCC	163

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
1757	A210G	GF	gctggctcggtcaagaGGAAACAAACCAAAATGG	164
1765	A240G	AF	gggacggtcggtagatGGCTTCACGGAGGAAGAA	165
1765	A240G	EF	TTAGGAGCTGTGAGGTATG	166
1765	A240G	ER	GACGATGCCTTCAGCACATAAGATGGAGCAGGGTAG	167
1765	A240G	GF	gctggctcggtcaagaGGCTTCACGGAGGAAGAG	168
1776	A200G	AF	gggacggtcggtagatAAAGGGCTCCCAACACCA	169
1776	A200G	EF	TGAGCACAAGATCAGAGAGG	170
1776	A200G	ER	GACGATGCCTTCAGCACAAGACAGAGACGCAGGAATG	171
1776	A200G	GF	gctggctcggtcaagaAAAGGGCTCCCAACACCG	172
1799	C370T	CF	gggacggtcggtagatAGGGACAACCAAAGTGAC	173
1799	C370T	EF	ATCATCAGAACAGCCCTAC	174
1799	C370T	ER	GACGATGCCTTCAGCACACAAGCCCACCTACTTACTC	175
1799	C370T	TF	gctggctcggtcaagaAGGGACAACCAAAGTGAT	176
1806	A201G	AF	gggacggtcggtagatTGGGCGTCCTGGTGGGCA	177
1806	A201G	EF	TCTTCGGGCTAACTCTTT	178
1806	A201G	ER	GACGATGCCTTCAGCACACTGTCACTCCAAACCTTCT	179
1806	A201G	GF	gctggctcggtcaagaTGGGCGTCCTGGTGGGCG	180
1837	C413T	CF	gggacggtcggtagatCTCAGCTTCATGCAGGGC	181
1837	C413T	EF	CCCACTCAGCCCTGCTCTT	182
1837	C413T	ER	GACGATGCCTTCAGCACAGCATCCTTGGCGGTCTTG	183
1837	C413T	TF	gctggctcggtcaagaCTCAGCTTCATGCAGGGT	184
1870	C323T	CF	gggacggtcggtagatCTCCTCATTGCCTCCTTC	185
1870	C323T	EF	CACCTCTTTTCTCCTTCTCTT	186
1870	C323T	ER	GACGATGCCTTCAGCACACCCACCCCCTCTATCTAC	187
1870	C323T	TF	gctggctcggtcaagaCTCCTCATTGCCTCCTTT	188
1882	C115T	CR	gggacggtcggtagatGTCCCCCACAAGTCCTCG	189
1882	C115T	EF	GACGATGCCTTCAGCACAGACCTGTACCCTTTACCC	190
1882	C115T	ER	TGTTTCCCTGTCTGTTTC	191
1882	C115T	TR	gctggctcggtcaagaGTCCCCCACAAGTCCTCA	192
1988	C214T	CF	gggacggtcggtagatGTGACTCGGTCCTATACC	193
1988	C214T	EF	GTGGGCTGTGATTGTGTT	194
1988	C214T	ER	GACGATGCCTTCAGCACATCTCGTCGTCGTAGTAGTTGT	195
1988	C214T	TF	gctggctcggtcaagaGTGACTCGGTCCTATACT	196
2000	C349T	CR	gggacggtcggtagatAGTATGGTAATTAGGAAG	197

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
2000	C349T	EF	GACGATGCCTTCAGCACACTGACACTGAGCCACAAC	198
2000	C349T	ER	AACTGATGAGCAAGAAGGA	199
2000	C349T	TR	gctggctcggtcaagaAGTATGGTAATTAGGAAA	200
2071	A338G	AR	gggacggtccgtagatAAAATTGTTTCCTGTGAT	201
2071	A338G	EF	GACGATGCCTTCAGCACACATTGCTATTCTCAGGCTATA	202
2071	A338G	ER	CCCATTCTCTGCTTGACAGT	203
2071	A338G	GR	gctggctcggtcaagaAAAATTGTTTCCTGTGAC	204
2078	G876T	EF	CCAGAGAGGGGATAAAGA	205
2078	G876T	ER	GACGATGCCTTCAGCACAGAGTGTCAAGAGGAACAGG	206
2078	G876T	GF	gggacggtcggtagatTGGCTGCTGAGGTCTGAG	207
2078	G876T	TF	gctggctcggtcaagaTGGCTGCTGAGGTCTGAT	208
2085	G415T	EF	GCTTTTTCTTTTCATTACATC	209
2085	G415T	ER	GACGATGCCTTCAGCACACCTCTTTTAGAATCAGAGACA	210
2085	G415T	GF	gggacggtcggtagatGGTAGTGTTACCAGAAAG	211
2085	G415T	TF	gctggctcggtcaagaGGTAGTGTTACCAGAAAT	212
2095	A406G	AR	gggacggtcggtagatTGTGCACCGGGATATTTT	213
2095	A406G	EF	GACGATGCCTTCAGCACAATGTGTGCTTGGGTTCTT	214
2095	A406G	ER	GGTGTTTCTCCTCCTCTCT	215
2095	A406G	GR	gctggctcggtcaagaTGTGCACCGGGATATTTC	216
2119	A67G	AR	gggacggtcggtagatGTGGGCACCAAACGCTAT	217
2119	A67G	EF	GACGATGCCTTCAGCACAGATGTAGGGCTGGAAGTG	218
2119	A67G	ER	TCAAGAAAAATGGGAGTTG	219
2119	A67G	GR	gctggctcggtcaagaGTGGGCACCAAACGCTAC	220
2141	A176G	EF	TGTAGCATCGGTAGGTTC	221
2141	A176G	ER	CAACATCAGACTTTCTTTTTC	222
2141	A176G	AR	gggacggtcggtagatTGGTACAGGGCTAGTTTT	223
2141	A176G	GR	gctggctcggtcaagaTGGTACAGGGCTAGTTTC	224
2182	A318G	AF	gggacggtcggtagatAGGCGGGCCAAGGGTGAA	225
2182	A318G	EF	TTCTCTCTCCCCTTCTGT	226
2182	A318G	ER	GACGATGCCTTCAGCACATAAATGTTCACTCTTCTTGCT	227
2182	A318G	GF	gctggctcggtcaagaAGGCGGGCCAAGGGTGAG	228
2234	G296T	EF	GGGTTGTTCCAGGGCGCTATT	229
2234	G296T	ER	GACGATGCCTTCAGCACATGTGGAGAGGCCGGGTGC	230
2234	G296T	GF	gggacggtcggtagatGAACCAGCCCCCTGGAAG	231

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
2234	G296T	TF	gctggctcggtcaagaGAACCAGCCCCCTGGAAT	232
2281	A227C	AR	gggacggtcggtagatCAGGCTTGGAGACCTGGT	233
2281	A227C	CR	gctggctcggtcaagaCAGGCTTGGAGACCTGGG	234
2281	A227C	EF	GACGATGCCTTCAGCACAGGGTATTCAGTTGGAAGG	235
2281	A227C	ER	AAGGCAAGGTTCTTAGTTG	236
2298	A77C	AR	gggacggtcggtagatTCTAAAAGCACTTGAAAT	237
2298	A77C	CR	gctggctcggtcaagaTCTAAAAGCACTTGAAAG	238
2298	A77C	EF	GACGATGCCTTCAGCACACCTGCTAGTGTTTTCTGG	239
2298	A77C	ER	TGTAACTGATAGGTGGTGG	240
2341	C286T	CR	gggacggtccgtagatTGAAGATTCTGCTCAGCG	241
2341	C286T	EF	GACGATGCCTTCAGCACAAGGGCCCGGGACTCAT	242
2341	C286T	ER	TTTGGGGTCCTGCGGATG	243
2341	C286T	TR	gctggctcggtcaagaTGAAGATTCTGCTCAGCA	244
2357	A165G	AF	gggacggtcggtagatCAAAGAAGACGAAAATGA	245
2357	A165G	EF	CTCAAGTTTGTTACTGATTTCTC	246
2357	A165G	ER	GACGATGCCTTCAGCACAGGGTTACGTCTGCTCTTC	247
2357	A165G	GF	gctggctcggtcaagaCAAAGAAGACGAAAATGG	248
2366	G50T	EF	GACGATGCCTTCAGCACACTGCTCCGAAACACGGTC	249
2366	G50T	ER	GCATCTTCAGCCCTTCTTACTCT	250
2366	G50T	GR	gggacggtcggtagatCTCCTGGGCACCACGGGC	251
2366	G50T	TR	gctggctcggtcaagaCTCCTGGGCACCACGGGA	252
2995	A299C	ER	gacgatgccttcagcacaTGGGATTAGACACGAGAG	253
2995	A299C	EF	AAAGAACTGGAAGAAGGAA	254
2995	A299C	AF	gggacggtcggtagatGTCACCTCCTTTCCACTA	255
2995	A299C	CF	gctggctcggtcaagaGTCACCTCCTTTCCACTC	256
3360	G777T	ER	gacgatgccttcagcacaAGAAAAATGAGAGGGAAAAC	257
3360	G777T	EF	GATGAAGGGAAATGGAAC	258
3360	G777T	GF	gggacggtcggtagatCCAACTATATAGGAGCCG	259
3360	G777T	TF	gctggctcggtcaagaCCAACTATATAGGAGCCT	260
3464	A110G	EF	CTGAACCGAGGAGATTTTT	261
3464	A110G	ER	TGATGCTTACAGAACTGGG	262
3464	A110G	AF	gggacggtcggtagatGTGTAGTGGGCAGGGTTA	263
3464	A110G	GF	gctggctcggtcaagaGTGTAGTGGGCAGGGTTG	264
3975	A65C	EF	gacgatgccttcagcacaAAAAGAACCCTGGTGAAG	265

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
3975	A65C	ER	CCCTGATAAAAGAGATGGA	266
3975	A65C	AR	gggacggtcggtagatCGCATGGGAGTCAGGGAT	267
3975	A65C	CR	gctggctcggtcaagaCGCATGGGAGTCAGGGAG	268
3976	A239G	EF	gacgatgccttcagcacaATGAGGGAGCAAGACAAG	269
3976	A239G	ER	TGATAAAAGAGATGGAAGGAG	270
3976	A239G	AR	gggacggtcggtagatGTCACTGTTTGTCACTGT	271
3976	A239G	GR	gctggctcggtcaagaGTCACTGTTTGTCACTGC	272
4206	A304T	EF	gacgatgccttcagcacaCTTTTTAGCCAAGTGGAG	273
4206	A304T	ER	GGATCTGAGGAATCTGTG	274
4206	A304T	AR	gggacggtcggtagatACCAGGCAGAGAGAAAAT	275
4206	A304T	TR	gctggctcggtcaagaACCAGGCAGAGAGAAAAA	276
4912	A74G	EF	CTTCACTGAGCGTCCGCAGAG	277
4912	A74G	ER	CCGTCGGCCCGATTCA	278
4912	A74G	AR	CAGGCGAGCCTCAGCCCT	279
4912	A74G	GR	CAGGCGAGCCTCAGCCCC	280
4925	A251C	EF	TCATTTCCCAATTTACCTCC	281
4925	A251C	ER	CCTCTTTCCCATCTCCCT	282
4925	A251C	AF	gggacggtcggtagatAGCCAGGAGCCTGCGTCA	283
4925	A251C	CF	gctggctcggtcaagaAGCCAGGAGCCTGCGTCC	284
4966	A251G	EF	CATTGCTCTTCCTCTCTGT	285
4966	A251G	ER	GTGTCATCATTCCTTTCTTG	286
4966	A251G	AR	gggacggtcggtagatTCAGAGACATGAGTCCAT	287
4966	A251G	GR	gctggctcggtcaagaTCAGAGACATGAGTCCAC	288
5014	A2057G	ER	gacgatgccttcagcacaCACCTGTCCCACCCTATTT	289
5014	A2057G	EF	GTCCTGAACCCCCATTCT	290
5014	A2057G	AF	gggacggtcggtagatGCCTGCACTGCGTTCCTA	291
5014	A2057G	GF	gctggctcggtcaagaGCCTGCACTGCGTTCCTG	292
5296	A251G	EF	GCTCCTCTGCCTTCTGCTT	293
5296	A251G	ER	ATTTGCCCACTGCCCTTC	294
5296	A251G	AF	gggacggtcggtagatTGGCTGCAGGTGCGTCCA	295
5296	A251G	GF	gctggctcggtcaagaTGGCTGCAGGTGCGTCCG	296
5298	C172T	EF	GCCACACACACCTTAACA	297
5298	C172T	ER	AAAGTTCTCTGCCTCCAA	298
5298	C172T	CF	gggacggtcggtagatAGCTCTCAGCTGGGGTGC	299

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
5298	C172T	TF	gctggctcggtcaagaAGCTCTCAGCTGGGGTGT	300
5457	A134G	EF	AGCAGAATGGGCAATAGA	301
5457	A134G	ER	AGAGATGTGGGCAGAGAA	302
5457	A134G	AF	gggacggtcggtagatGGAAAGCCTACTTTCTTA	303
5457	A134G	GF	gctggctcggtcaagaGGAAAGCCTACTTTCTTG	304
5704	C61T	EF	ACAGCCATAACAGGAGTG	305
5704	C61T	ER	GGGTTACTCAACCTAAGAGA	306
5704	C61T	CR	gggacggtcggtagatGTTCTCTTTGGGAAAACG	307
5704	C61T	TR	gctggctcggtcaagaGTTCTCTTTGGGAAAACA	308
5717	A1960G	EF	gacgatgccttcagcacaGAACAGAAACCACAGAACC	309
5717	A1960G	ER	GTCCCACCCTATTTTGAG	310
5717	A1960G	AR	gggacggtcggtagatCACTGGCCCACCTCCCTT	311
5717	A1960G	GR	gctggctcggtcaagaCACTGGCCCACCTCCCTC	312
5959	A71G	EF	gacgatgccttcagcacaACCATGCCTGACTTAACC	313
5959	A71G	ER	TTGTTTCCTGTCCTCTTTC	314
5959	A71G	AR	gggacggtcggtagatGTTAAGAGGCTGGGCAGT	315
5959	A71G	GR	gctggctcggtcaagaGTTAAGAGGCTGGGCAGC	316
6162	C340G	EF	gacgatgccttcagcacaAGTGTTGTTAGGAGCAAAG	317
6162	C340G	ER	CTTAGGAAACTGAGGTGG	318
6162	C340G	CR	gggacggtcggtagatCTGCAGCCTGGGCAACAG	319
6162	C340G	GR	gctggctcggtcaagaCTGCAGCCTGGGCAACAC	320
6236	C906T	ER	gacgatgccttcagcacaTGGACACATTTGAGCTTT	321
6236	C906T	EF	CTTCCCCAGAGATGACTAC	322
6236	C906T	CF	gggacggtcggtagatCCCCATCCTACTCAGCAC	323
6236	C906T	TF	gctggctcggtcaagaCCCCATCCTACTCAGCAT	324
6744	C348T	ER	gacgatgccttcagcacaGGTTACAGTGAGCCAAGA	325
6744	C348T	EF	AGGTGAAGAAAGCAAAATAC	326
6744	C348T	CF	gggacggtcggtagatTGGTGTGTGTTTTGTTTC	327
6744	C348T	TF	gctggctcggtcaagaTGGTGTGTGTTTTGTTTT	328
7133	C63G	EF	TTGAGACCCTACAGAGCCA	329
7133	C63G	ER	GGCAAGCTGAGGTGAAAG	330
7133	C63G	CR	gggacggtcggtagatAATAAGGTAAGAAATGAG	331
7133	C63G	GR	gctggctcggtcaagaAATAAGGTAAGAAATGAC	332
8210	A251G	EF	TAATTTCTAATGGCCTTCC	333

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
8210	A251G	ER	TCACTTACTCCCTGATGTCT	334
8210	A251G	AR	gggacggtcggtagatCATTGGGTTTTCCCTCAT	335
8210	A251G	GR	gctggctcggtcaagaCATTGGGTTTTCCCTCAC	336
8592	C46T	ER	gacgatgccttcagcacaACATTTAGTGCCAACATCAC	337
8592	C46T	EF	CTCTTCCCTGAGACACCA	338
8592	C46T	CF	gggacggtcggtagatGAAGGTGAAGGCCAGAGC	339
8592	C46T	TF	gctggctcggtcaagaGAAGGTGAAGGCCAGAGT	340
8943	A251C	EF	GAGGCTGAGACAGAAGAA	341
8943	A251C	ER	GTTTGACATTAAAGAAAATGAG	342
8943	A251C	AR	gggacggtcggtagatGGCTGGAGTGCAGTGATT	343
8943	A251C	CR	gctggctcggtcaagaGGCTGGAGTGCAGTGATG	344
9193	C88G	EF	CACGCTGTTGAGTGGG	345
9193	C88G	ER	CGCAGGTCTACGGTCA	346
9193	C88G	CR	gggacggtcggtagatCCCGGGTCTGAGGCTGCG	347
9193	C88G	GR	gctggctcggtcaagaCCCGGGTCTGAGGCTGCC	348
9516	A187G	EF	CACACACACACACACACAC	349
9516	A187G	ER	GGTCCCTTACTTTCCTCTT	350
9516	A187G	AR	gggacggtcggtagatCCTATCCCTACTTCCCCT	351
9516	A187G	GR	gctggctcggtcaagaCCTATCCCTACTTCCCCC	352
9698	A251G	EF	GTGACCCCAAAAGAGAGA	353
9698	A251G	ER	CTAGCTTGTTACTGCCTCC	354
9698	A251G	AF	gggacggtcggtagatGGCACGACCCCGCCCCCA	355
9698	A251G	GF	gctggctcggtcaagaGGCACGACCCCGCCCCCG	356
9883	A249G	EF	TCCACAACCTCAAAACCAC	357
9883	A249G	ER	CACAGTCCTGCAAGCTCA	358
9883	A249G	AR	gggacggtcggtagatCCGTGGCCGTGGCTCACT	359
9883	A249G	GR	gctggctcggtcaagaCCGTGGCCGTGGCTCACC	360
10481	A107T	ER	gacgatgccttcagcacaGTTCGGGGCTCCACTT	361
10481	A107T	EF	TAGCGGGACAGCGCTG	362
10481	A107T	AF	gggacggtcggtagatCCCGGCGCGCCTCGGAGA	363
10481	A107T	TF	gctggctcggtcaagaCCCGGCGCGCCTCGGAGT	364
10542	C367T	EF	gacgatgccttcagcacaAATACACTGGGTCCTGCT	365
10542	C367T	ER	ATACTGCTGGCCTTTCTC	366
10542	C367T	CR	gggacggtcggtagatGGTCAGGGGAGCCCAGAG	367

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
10542	C367T	TR	gctggctcggtcaagaGGTCAGGGGAGCCCAGAA	368
10600	A251G	EF	CCTGGCAACTAACCTCTT	369
10600	A251G	ER	AGGCAGTCTCTCTGTCTACTC	370
10600	A251G	AR	gggacggtcggtagatATTGGCCCTGCTCAGGAT	371
10600	A251G	GR	gctggctcggtcaagaATTGGCCCTGCTCAGGAC	372
10621	C402T	EF	CCAGCCCTAAACCTAAA	373
10621	C402T	ER	AACCTCTCAAGATCAGACAC	374
10621	C402T	CF	gggacggtcggtagatTTAGCACTTAATAAGTAC	375
10621	C402T	TF	gctggctcggtcaagaTTAGCACTTAATAAGTAT	376
10745	A251G	EF	CCCCACAACAAAGAAAGA	377
10745	A251G	ER	GAAGCCAACTCTCCAACA	378
10745	A251G	AF	gggacggtcggtagatCAAGGATTTCAAAAACCA	379
10745	A251G	GF	gctggctcggtcaagaCAAGGATTTCAAAAACCG	380
10771	C64G	EF	gacgatgccttcagcacaCCAGGGAAGAGCAGAACC	381
10771	C64G	ER	TGTACGGGAAGAGGCAGA	382
10771	C64G	CR	gggacggtcggtagatAGGGTGACACAGGCCACG	383
10771	C64G	GR	gctggctcggtcaagaAGGGTGACACAGGCCACC	384
10870	A251G	EF	ATCCCATCCCAACACACA	385
10870	A251G	ER	CCGAGACCAAACTCATTCAC	386
10870	A251G	AR	gggacggtcggtagatGGCAGAGCCTGAGTCACT	387
10870	A251G	GR	gctggctcggtcaagaGGCAGAGCCTGAGTCACC	388
10877	A251C	EF	CCTGTTTCTCAACCTTCTC	389
10877	A251C	ER	ATGGTCTATGGAACCTAATCT	390
10877	A251C	AF	gggacggtcggtagatGCACTGATTCTGCTTCCA	391
10877	A251C	CF	gctggctcggtcaagaGCACTGATTCTGCTTCCC	392
10948	G140T	EF	AAGGACAGGGTCAGGAAAG	393
10948	G140T	ER	CAGAGGGAGGAAGGAGGT	394
10948	G140T	GF	gggacggtcggtagatATGGAGGAGGGTGTCTGG	395
10948	G140T	TF	gctggctcggtcaagaATGGAGGAGGGTGTCTGT	396
11001	C286T	EF	gacgatgccttcagcacaTTCCCAAAGACCCACA	397
11001	C286T	ER	CCTCCACCGCTATCAC	398
11001	C286T	CR	gggacggtcggtagatTGGCTGCAGGACGTCCAG	399
11001	C286T	TR	gctggctcggtcaagaTGGCTGCAGGACGTCCAA	400
11001	C286T	EF	TTCCCAAAGACCCACA	401

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
11001	C286T	ER	CCTCCACCGCTATCAC	402
11001	C286T	CR	gggacggtcggtagatTGGCTGCAGGACGTCCAG	403
11001	C286T	TR	gctggctcggtcaagaTGGCTGCAGGACGTCCAA	404
11073	C215G	EF	CCCAACCACCCGTTCC	405
11073	C215G	ER	GCGCGGGAGCTAGAGA	406
11073	C215G	CF	gggacggtcggtagatGAAGCTGCGGGCCGGACC	407
11073	C215G	GF	gctggctcggtcaagaGAAGCTGCGGGCCGGACG	408
11153	C116T	EF	CGAGTGGGAAGAAAAGTAGA	409
11153	C116T	ER	ATGACTGCCTGCCTAGAA	410
11153	C116T	CR	gggacggtcggtagatAAGATAGGGTAGAGGCCG	411
11153	C116T	TR	gctggctcggtcaagaAAGATAGGGTAGAGGCCA	412
11210	C194T	EF	GAGGAGTGAGGGAAAGTAAG	413
11210	C194T	ER	AAATGGAGAGAGATGGGA	414
11210	C194T	CF	gggacggtcggtagatCCAGGAAATGACATGATC	415
11210	C194T	TF	gctggctcggtcaagaCCAGGAAATGACATGATT	416
11248	C225T	EF	TGAGTTGAACAGCACTTGG	417
11248	C225T	ER	AGGGTAAGGGAGGGAAAA	418
11248	C225T	CR	gggacggtcggtagatTGATTCTTTCGCTTGGCG	419
11248	C225T	TR	gctggctcggtcaagaTGATTCTTTCGCTTGGCA	420
11372	A251G	EF	TAGAAAAGAAGAAAAATCAA	421
11372	A251G	ER	ACACACACACACACACAC	422
11372	A251G	AR	gggacggtcggtagatCATCACCTTTTAGTTTCT	423
11372	A251G	GR	gctggctcggtcaagaCATCACCTTTTAGTTTCC	424
11449	C251G	EF	ACAGAAGAACAACAACAAAAC	425
11449	C251G	ER	TGCGTATGAGGTAAAGAGA	426
11449	C251G	CF	gggacggtcggtagatATGAGTGAAGCCTGTCTC	427
11449	C251G	GF	gctggctcggtcaagaATGAGTGAAGCCTGTCTG	428
11450	A251T	EF	ACAGAAGAACAACAACAAAAC	429
11450	A251T	ER	TGCGTATGAGGTAAAGAGA	430
11450	A251T	AR	gggacggtcggtagatGGACCATAATCTTGAAGT	431
11450	A251T	TR	gctggctcggtcaagaGGACCATAATCTTGAAGA	432
11470	C251T	EF	GCTTGTCTTGTCTGATAGGTG	433
11470	C251T	ER	CAACGTGAGAATTTCCAAAAT	434
11470	C251T	CR	gggacggtcggtagatTGAGAATTTCCAAAATAG	435

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
11470	C251T	TR	gctggctcggtcaagaTGAGAATTTCCAAAATAA	436
11472	A251T	EF	TACATTCAAGGCAAGAAAA	437
11472	A251T	ER	TGATTAGTTACAATTACCTCTAGTATC	438
11472	A251T	AF	gggacggtcggtagatAGTTTGTCAGTAAATGTA	439
11472	A251T	TF	gctggctcggtcaagaAGTTTGTCAGTAAATGTT	440
11487	A485T	EF	gacgatgccttcagcacaAGAGAGCAGCTAGACTGAGA	441
11487	A485T	ER	TTCCTGCAAACAGTTGAG	442
11487	A485T	AR	gggacggtcggtagatAGTTGAGGGCTCAGGATT	443
11487	A485T	TR	gctggctcggtcaagaAGTTGAGGGCTCAGGATA	444
11488	C533G	EF	gacgatgccttcagcacaAGAGAGCAGCTAGACTGAGA	445
11488	C533G	ER	GTAAATAAAATGGGATGGTG	446
11488	C533G	CR	gggacggtcggtagatGCCCCAGCAAGCTGCATG	447
11488	C533G	GR	gctggctcggtcaagaGCCCCAGCAAGCTGCATC	448
11493	A171G	EF	CCTTTTGTGTTTTGTTTTGT	449
11493	A171G	ER	CTTCTCCACCTTCCATTC	450
11493	A171G	AF	gggacggtcggtagatGGGAACTCCTAAATCAAA	451
11493	A171G	GF	gctggctcggtcaagaGGGAACTCCTAAATCAAG	452
11502	C455T	EF	gacgatgccttcagcacaACGATGGGGTCAGAGTCA	453
11502	C455T	ER	CCTACATTTCACACACGAACA	454
11502	C455T	CR	gggacggtcggtagatACACACTCCTCTCTCAAG	455
11502	C455T	TR	gctggctcggtcaagaACACACTCCTCTCTCAAA	456
11534	G258T	EF	GCCATCGTCTTTCCCT	457
11534	G258T	ER	TCCTCCCTCCTTCTCTCT	458
11534	G258T	GR	gggacggtcggtagatCCTCCACCCACCAGGGCC	459
11534	G258T	TR	gctggctcggtcaagaCCTCCACCCACCAGGGCA	460
11537	A251G	EF	CCTCTTTCTCCTCCTCTTC	461
11537	A251G	ER	CTCTTCCTGTCTTCTCCTCT	462
11537	A251G	AF	gggacggtcggtagatAGATGGACCTCTACAGGA	463
11537	A251G	GF	gctggctcggtcaagaAGATGGACCTCTACAGGG	464
11560	A185G	EF	CTCCTCCAACTCCTTTAC	465
11560	A185G	ER	ATACTTCTCACTGCATCCT	466
11560	A185G	AR	gggacggtcggtagatCCTGTCCCCTCCCTAGTT	467
11560	A185G	GR	gctggctcggtcaagaCCTGTCCCCTCCCTAGTC	468
11594	C251T	EF	CACCTTCCTGAACTCACTC	469

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
11594	C251T	ER	TGATGTCTGTGCTGTCCT	470
11594	C251T	CR	gggacggtcggtagatTCTGGTCCACTCAAGGAG	471
11594	C251T	TR	gctggctcggtcaagaTCTGGTCCACTCAAGGAA	472
11624	C251T	EF	TCGGGAGGTGTAAGTAAG	473
11624	C251T	ER	CCACAGTCAGAAGAGACAA	474
11624	C251T	CR	gggacggtcggtagatAGAGACCCTGGTCCCAAG	475
11624	C251T	TR	gctggctcggtcaagaAGAGACCCTGGTCCCAAA	476
11627	C251T	EF	TTTATCACTACACCCCCTACTC	477
11627	C251T	ER	GACAGACCGACCAATCAC	478
11627	C251T	CR	gggacggtcggtagatCCCTGGGAAGGTTGAGAG	479
11627	C251T	TR	gctggctcggtcaagaCCCTGGGAAGGTTGAGAA	480
11650	A146G	EF	CTGTCTGTTTGGGTCTTC	481
11650	A146G	ER	CGTTGTTCTCTGTCCACT	482
11650	A146G	AR	gggacggtcggtagatGGCCAAATGTCTAAAAGT	483
11650	A146G	GR	gctggctcggtcaagaGGCCAAATGTCTAAAAGC	484
11654	A251G	EF	CGTATCTCTTGCCTTTCTT	485
11654	A251G	ER	CTTCTCTTATGCCTTCCC	486
11654	A251G	AF	gggacggtcggtagatTTACTTGAAAGGACACCA	487
11654	A251G	GF	gctggctcggtcaagaTTACTTGAAAGGACACCG	488
11655	A251C	EF	CGTATCTCTTGCCTTTCTT	489
11655	A251C	ER	CTTCTCTTATGCCTTCCC	490
11655	A251C	AF	gggacggtcggtagatTTCTGCACTAAAGCTGTA	491
11655	A251C	CF	gctggctcggtcaagaTTCTGCACTAAAGCTGTC	492
11656	C251T	EF	TGGGAAGAAAAAGAGAAG	493
11656	C251T	ER	GTTGAAACACTGCACAAG	494
11656	C251T	CR	gggacggtcggtagatCAGGGCTGTTGGGTGAAG	495
11656	C251T	TR	gctggctcggtcaagaCAGGGCTGTTGGGTGAAA	496
11825	A277G	ER	gacgatgccttcagcacaTGAATAGACAGGGACGAA	497
11825	A277G	EF	GACCTTGGAAATAATGGAG	498
11825	A277G	AF	gggacggtcggtagatCAACCCAGCAAAAATGGA	499
11825	A277G	GF	gctggctcggtcaagaCAACCCAGCAAAAATGGG	500
11914	A246T	EF	gacgatgccttcagcacaTTGGAAGTGAGATAAGATAGGT	501
11914	A246T	ER	ACGGTGAGAATGAGAGGT	502
11914	A246T	AR	gggacggtcggtagatAAAACAGACATCAGAGGT	503

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
11914	A246T	TR	gctggctcggtcaagaAAAACAGACATCAGAGGA	504
12097	A411G	ER	gacgatgccttcagcacaGATGAAACCCTGTCTCTACT	505
12097	A411G	EF	TTATCAACCTTAGTCTCCCT	506
12097	A411G	AF	gggacggtcggtagatACCTGCCACCACACCCAA	507
12097	A411G	GF	gctggctcggtcaagaACCTGCCACCACACCCAG	508
12366	A412G	ER	gacgatgccttcagcacaGCTGATGTGGTTGTGAG	509
12366	A412G	EF	GTTCCTGTAGCTCGTGTAG	510
12366	A412G	AF	gggacggtcggtagatCTCCCCGCCCTGCAGCAA	511
12366	A412G	GF	gctggctcggtcaagaCTCCCCGCCCTGCAGCAG	512
12619	A25G	ER	gacgatgccttcagcacaTGGCTGGACTTTGACTGATA	513
12619	A25G	EF	TCTTGTTTGTGTCACAGTGC	514
12619	A25G	AF	gggacggtcggtagatTGTGTCACAGTGCTCTGA	515
12619	A25G	GF	gctggctcggtcaagaTGTGTCACAGTGCTCTGG	516
13025	A585C	EF	gacgatgccttcagcacaTTTAAGTAACATGACAAACTC	517
13025	A585C	ER	ATCTGATAACTGAGCAGG	518
13025	A585C	AR	gggacggtcggtagatCTATTAAGTAACTGGTGT	519
13025	A585C	CR	gctggctcggtcaagaCTATTAAGTAACTGGTGG	520
13191	A504G	ER	gacgatgccttcagcacaATTCTCCCATTTCTCCTGT	521
13191	A504G	EF	TGCCTCTTCTCCTCATTC	522
13191	A504G	AF	gggacggtcggtagatCCCTAATGTCTTCCTCTGA	523
13191	A504G	GF	gctggctcggtcaagaCCCTAATGTCTTCCTCTGG	524
900045	C116T	EF	ATCTCCTGATCCAAGTCC	525
900045	C116T	ER	CACACTGTGCCCATCTAC	526
900045	C116T	CR	gggacggtcggtagatCTGACTGATTACCTCATG	527
900045	C116T	TR	gctggctcggtcaagaCTGACTGATTACCTCATA	528
900078	A251G	EF	CATAGGTAAAGATCTGTAGGTG	529
900078	A251G	ER	CCACCTTGGAAGTTGGCAAA	530
900078	A251G	AR	gggacggtcggtagatattaaatcgcctctctcT	531
900078	A251G	GR	gctggctcggtcaagaattaaatcgcctctctcC	532
900107	C426T	ER	gacgatgccttcagcacaAGGGCTTTTTCAGGTAGA	533
900107	C426T	EF	GACCTTTCCTGGGTAGAA	534
900107	C426T	CF	gggacggtcggtagatACTCTGAACCTGGGGGAC	535
900107	C426T	TF	gctggctcggtcaagaACTCTGAACCTGGGGGAT	536
10000002	A103G	AF	gggacggtcggtagatGATCAACACAATCTTCAA	537

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
10000002	A103G	EF	CAGCTGAAAGAGATGAAATTTACT	538
10000002	A103G	ER	GACGATGCCTTCAGCACAAACTTATGAAGATTAAGGCATAGG	539
10000002	A103G	GF	gctggctcggtcaagaGATCAACACAATCTTCAG	540
10000006	G107A	AF	gctggctcggtcaagaGGGCTGGGCTGCTAGGGA	541
10000006	G107A	EF	AGACGAGTTCAAGGTGAGTG	542
10000006	G107A	ER	GACGATGCCTTCAGCACACCAAGTTTCCGAGTTTCC	543
10000006	G107A	GF	gggacggtcggtagatGGGCTGGGCTGCTAGGGG	544
10000014	A153C	AF	gggacggtcggtagatGTACCAATACATCCTGCA	545
10000014	A153C	CF	gctggctcggtcaagaGTACCAATACATCCTGCC	546
10000014	A153C	EF	CTGCTGATGTCTCTGTTG	547
10000014	A153C	ER	GACGATGCCTTCAGCACAGACTTACTTTGCTCACACTT	548
10000025	C291T	CF	gggacggtcggtagatCCTCACTTCCTCAACGCC	549
10000025	C291T	EF	CCTCTCTGTCTGGTTATCTTG	550
10000025	C291T	ER	GACGATGCCTTCAGCACAAGTGTGCCTCCTGGTTAG	551
10000025	C291T	TF	gctggctcggtcaagaCCTCACTTCCTCAACGCT	552

Please delete paragraph [0634] and replace it with the following:

TABLE 2b

OLIGONUCLEOTIDE PRIMERS USED FOR GENOTYPING USING PYROSEQUENCING

[0634] The baySNP number refers to an internal numbering of the PA SNPs. Primer sequences are listed for preamplification of the genomic fragments and for sequencing of the SNP using the pyrosequencing method. Bio: Biotinylated Oligonucleotide.

baySNP	NAME	SEQUENCE	SEQ ID NO:
2995	Primer F	GCCAAGACTAGGAAGTAAGTGT	553
2995	Primer R	Bio-CCCAGAACCACAAAGCTAGTAA	554
2995	Seq.	TGCCCTGGTCACCTCCTTTCC	555
3689	Primer F	BIO-CTGACCCTGACCTTCATACTCAA	556
3689	Primer R	AGAAGAAAGAAGCCTCTCTACAGTT	557
3689	Seq.	AACAGATCAGGTTGGTG	558
4838	Primer F	Bio-CAAAGATGACCTTATGGCTCTGA	559
4838	Primer R	GTCTCGGAACATGACCTTTAGT	560
4838	Seq.	TGACTAAGAATGTAATGGGGAAGA	561

baySNP	NAME	SEQUENCE	SEQ ID NO:
6498	Primer F	CTTTGTGGATCTTTCTGCGGTGT	562
6498	Primer R	Bio-CCATGTTGAGGAGCCCAGAGTGA	563
6498	Seq.	ATTACAGTTGTGAGATTGTGC	564
8021	Primer F	GGCCTTCTATGTACTAGGCG	565
8021	Primer R	Bio-CTCTTTCTGGAGGCATCAATC	566
8021	Seq.	CACAGGGAGACCCC	567
8060	Primer F	Bio-GCCTTATTTTCCACTCCCACCT	568
8060	Primer R	TACCTTTCCCCATCCCAACTG	569
8060	Seq.	TCAGCATATGTTTGGATT	570
8846	Primer F	ATTTGAGAGAAGGTAGGGT	571
8846	Primer R	BIO-TTTGTTACTCTGTAGCCA	572
8846	Seq.	AAATATTCAGTAACTTGTTT	573
9849	Primer F	AAG CAG CAA TCG AAT CCC TT	574
9849	Primer R	TGT TGT TGT TTG GCT AGC TCC	575
9849	Seq.	CCT GCC TTA CTG AGA GCC AAA	576
10079	Primer F	Bio-CACGCCAATTCCCACCATCCT	577
10079	Primer R	GTCCGTCGAGGGGGAATGTGTTT	578
10079	Seq.	AATGTGTTTCTTGGGGGT	579
10747	Primer F	CTAACCATCTTCCAAATGCTTAATC	580
10747	Primer R	BIO-TCCTTGAGTCTGAGTTTCCC	581
10747	Seq.	CACAAGAAACCCTGAAA	582
11578	Primer F	CTC GGC GTG CTT GGT AAT AA	583
11578	Primer R	CGG AGC CGA ACT CTG GAG GAA TCT	584
11578	Seq.	GGC TGG CAA GTT GTT CCA TCC CAC	585
11644	Primer F	TGA GCA GCG CAT CCT	586
11644	Primer R	TGC AGC CCA CTG ACT CAA	587
11644	Seq.	GCT GTT ACT CAG TAT GAT	588
12008	Primer F	CCGAAGACCAAGACGC	589
12008	Primer R	Bio-TCTTCCATAAAAACAAGGCTC	590
12008	Seq.	AAACAAGAAATTCTGTTTA	591
13937	Primer F	TGA CAG CTC CCA TTG GAA	592
13937	Primer R	AAT TAA TGC GAT CCC TC	593
13937	Seq.	GAC AGC TCC CAT TGG AAG	594
900002	Primer F	ATTGGGCAGGGATAAGAGAAAAG	595

baySNP	NAME	SEQUENCE	SEQ ID NO:
900002	Primer R	Bio-GATGAATCACAGAATGCGGTAT	596
900002	Seq.	CACACAGCAGTTCACGCA	597
900013	Primer F	GCCAAGACTAGGAAGTAAGTGT	598
900013	Primer R	Bio- CCCAGAACCACAAAGCTAGTAA	599
900013	Seq.	TGCCCTGGTCACCTCCTTTCC	600
900025	Primer F	Bio-AGTGGCTCACTTGCTAACG	601
900025	Primer R	CTGGGGAAGAAAATAAATGAA	602
900025	Seq.	CTTGCTCTTAGGATACACGT	603
900032	Primer F	AGCGTCTTCACCATCTGCT	604
900032	Primer R	Bio-GGGAAGGAGGAAGCCAAACA	605
900032	Seq.	ACATGTCTGATGATACCTGG	606
900045	Primer F	BIO-GCCATGCACGATTTCCC	607
900045	Primer R	CACTGTGCCCATCTACGAG	608
900045	Seq.	GGACCTGACTGATTACCT	609
900065	Primer F	GAGTAGCTAGGATCACAGGTGCGT	610
900065	Primer R	BIO-TGTTCGAGATTTAAGAAAGTTGGC	611
900065	Seq.	CAGGTGCGTGCCACCATGCCC	612
900082	Primer F	CAC ACA ATT TTC CAC TTA	613
900082	Primer R	GAC TCC AGT TTT CTA TCA	614
900082	Seq.	ATG TTG ATG TAA TCT ACT	615
900096	Primer F	TGGGGCAAGCAACAGTGGT	616
900096	Primer R	Bio-TAGGCAGGGCAAGGGATTAGG	617
900096	Seq.	TTTAAATTCTCTGACAGAGAC	618
900107	Primer F	BIO-GCCACCAGCCCACACTCTGAACCTG	619
900107	Primer R	CCATCAGCCTTCACCCACGTGCCA	620
900107	Seq.	GCCTCAGCTTGACCT	621
900115	Primer F	Bio-GGTAAGTGCGTGCCTGGGAGATGC	622
900115	Primer R	CGGGGTGGGGAGGACAGAGC	623
900115	Seq.	GAGGACAGAGCAAAAGGAT	624
900121	Primer F	Bio-TGCCTTACAATATACAATGG	625
900121	Primer R	CAATGGGTAAGGAGTAAAGTT	626
900121	Seq.	TTCCAGCTGCTTTTA	627

Please delete paragraph **[0635]** and replace it with the following rewritten paragraph:

TABLE 2c

OLIGONUCLEOTIDE PRIMERS USED FOR GENOTYPING USING

RESTRICTION FRAGMENT LENGTH POLYMORPHISM (RFLP)

[0635] The baySNP number refers to an internal numbering of the PA SNPs. Primer sequences are listed for preamplification of the genomic fragments. The restriction enzyme used for RFPL is indicated.

baySNP	NAME	SEQUENCE	ENZYME	SEQ ID NO:
900173	Primer F	GAACAAACCTCCGAGATGCTAC	Hind III	628
900173	Primer R	GTCTTATGTTACTGGGCTTTCACC	Hind III	629

Please delete paragraph **[0636]** and replace it with the following rewritten paragraph:

TABLE 2D

OLIGONUCLEOTIDE PRIMERS USED FOR GENOTYPING USING TAQMAN

[0636] The baySNP number refers to an internal numbering of the PA SNPs. Primer sequences are listed for amplification of the genomic fragments. In addition the respective fluorescent hybridisation probes are listed. If not otherwise stated, all fluorescent probes have a 'minor groove binder' (MGB) attached (Kutyavin et al., NUCLEIC ACIDS RESEARCH 28:655-661 (2000).

baySNP	F-SEQUENCE	R-SEQUENCE	VIC-MGB	FAM-MGB
52	CACCCTCTAGAATTCACTATTAATTTTCAAC (SEQ ID NO: 630)	GGCCTTGAAGAAGATTTTATATTGAGAA (SEQ ID NO: 648)	CTATGCATAcTTTTGC (SEQ ID NO: 666)	ATGCATAgTTTTGCATTAT (SEQ ID NO: 684)
542	TTTCGCTCCATCAACCAAGTC (SEQ ID NO: 631)	GATGGGTGATCAGCCGAATC (SEQ ID NO: 649)	CAATTGGaGTTGGGAGG (SEQ ID NO: 667)	AATTGGgGTTGGGAGG (SEQ ID NO: 685)
821	GCCCAGTTATACCTCAGTGTTGTAAC (SEQ ID NO: 632)	AGGTCAGTACAGAGGGTATCATGAGA (SEQ ID NO: 650)	TGTGATACCTGGaACAG (SEQ ID NO: 668)	CTGTGATACCTGGcACA (SEQ ID NO: 686)
1056	TGTATGCACGTGCGTGATCTG (SEQ ID NO: 633)	CGCCCTCGGCACTCTTG (SEQ ID NO: 651)	CCAAACAaCAGGACGG (SEQ ID NO: 669)	AAACAgCAGGACGGG (SEQ ID NO: 687)
1204	CTGTAAGCATCTGGAATTGTCATGA (SEQ ID NO: 634)	GGCTCAGTCTTTGATCTTTAGCAAG (SEQ ID NO: 652)	CACTCACATTAtAATTAG (SEQ ID NO: 670)	ACTCACATTAcAATTAGT (SEQ ID NO: 688)
1722	GGACCCTAAGAACCCCAGGAT (SEQ ID NO: 635)	ATGGGCTAACACAGGAGATGATG (SEQ ID NO: 653)	TGGCCTGGCGgTG (SEQ ID NO: 671)	TGGCCTGGCGaTGT (SEQ ID NO: 689)
1757	ACAGGGCTGGCAGCCAC (SEQ ID NO: 636)	AGCCTCTGCCCTCCTCCA (SEQ ID NO: 654)	AACCAAAATGaAGGAGAG (SEQ ID NO: 672)	ACCAAAATGgAGGAGAG (SEQ ID NO: 690)
1765	GGAGCTGTGAGGTATGGGCTT (SEQ ID NO: 637)	TGTCAAGATGCAGCTGAAGGTC (SEQ ID NO: 655)	ACGGAGGAAGAgGT (SEQ ID NO: 673)	ACGGAGGAAGAaGT (SEQ ID NO: 691)
1799	TTTGGTGGGTTGTCATTGACA (SEQ ID NO: 638)	TGGACATATGGGCGGACTCT (SEQ ID NO: 656)	AGTGTGATCaTCACTTT (SEQ ID NO: 674)	CAGTGTGATCgTCACT (SEQ ID NO: 692)
1837	CACTCAGCCCTGCTCTTTCC (SEQ ID NO: 639)	CATCCTTGGCGGTCTTGGT (SEQ ID NO: 657)	TGCAGGGcTACATGA (SEQ ID NO: 675)	TCATGCAGGGtTACAT (SEQ ID NO: 693)
1870	CTGGCTCCTGACCCTTGCT (SEQ ID NO: 640)	GGAGGATGCCATCTCGAACA (SEQ ID NO: 658)	TGCCTCCTTcTCACAC (SEQ ID NO: 676)	CCTCCTTtTCACACCGA (SEQ ID NO: 694)
1988	CCGTGGCTTCATGGTGACT (SEQ ID NO: 641)	CTACCTGTCCGGTGCATCATC (SEQ ID NO: 659)	TCCTATACcGTGGGTGT (SEQ ID NO: 677)	CTATACtGTGGGTGTCAT (SEQ ID NO: 695)
2000	TTCTCACTGTGATATATAAACTCAGACCC (SEQ ID NO: 642)	CGATGAACAGTTGGAATAGGTTGT (SEQ ID NO: 660)	TACTCATcTTCCTAATTAC (SEQ ID NO: 678)	CAAATATCTACTCATtTTC (SEQ ID NO: 696)
2085	TCATTACATCAGGTATATTGCACTGTAAA (SEQ ID NO: 643)	TCAGAGACACTGAAGAACTTAAAGAAATC (SEQ ID NO: 661)	TGTTACCAGAAAgAAA (SEQ ID NO: 679)	TGTTACCAGAAAtAAA (SEQ ID NO: 697)
2281	GCTGCATTGGAGAGGACTGATC	CGGTTAACTTATAAAGAAACGGATGTTC	CATACCACAAAaCCA	ACCACAAAcCCAGGTC

baySNP	F-SEQUENCE	R-SEQUENCE	VIC-MGB	FAM-MGB
	(SEQ ID NO: 644)	(SEQ ID NO: 662)	(SEQ ID NO: 680)	(SEQ ID NO: 698)
2298	TGCTAGTGTTTTCTGGTTGCATATT (SEQ ID NO: 645)	GGCACCGTGTAGACTTGATCTAAA (SEQ ID NO: 663)	TCATGGGCaTTTCA (SEQ ID NO: 681)	TATCATGGGCcTTTCA (SEQ ID NO: 699)
2357	GCGAAGTGTCGGACACCAA (SEQ ID NO: 646)	GGTTACGTCTGCTCTTCGATCCT (SEQ ID NO: 664)	AAGACGAAAATGaATC (SEQ ID NO: 682)	AAGACGAAAATGgATC (SEQ ID NO: 700)
4838	AAGATGACCTTATGGCTCTGAGATG (SEQ ID NO: 647)	TCTCGGAACATGACCTTTAGTCTGT (SEQ ID NO: 665)	AAGAAtTGCCCTGCCT (SEQ ID NO: 683)	AAGAAcTGCCCTGCC (SEQ ID NO: 701)
5320	GGGATATATAGTAGAAAAACAAGCCTGTCT (SEQ ID NO: 702)	CAACTTAATCACTACTACTCCATGTAAAGCA (SEQ ID NO: 717)	AAGGAAAGCTGGaTATG (SEQ ID NO: 732)	AGGAAAGCTGGgTATGT (SEQ ID NO: 747)
5717	GGCCCGCTCCTGGCT (SEQ ID NO: 703)	AACCCCACACCTTCAGTCTAGAAA (SEQ ID NO: 718)	Vic-CCACCTCCCTtCTAGCCTCAGTTGC-TAMRA (SEQ ID NO: 733)	Fam-CCCACCTCCCTcCTAGCCTCAGTT-Tamra (SEQ ID NO: 748)
5959	ACCAGAAACAAATGCCAACCA (SEQ ID NO: 704)	CAGTGTGAAACCAAGGGATGTC (SEQ ID NO: 719)	Vic-CGAATGTGgCTGCCCAGCC-TAMRA (SEQ ID NO: 734)	Fam-TCGAATGTGaCTGCCCAGCCTC-Tamra (SEQ ID NO: 749)
6482	CATAGTTTAGGATAAACAAAAGGGATTCA (SEQ ID NO: 705)	TGTCATGGAAACGCCACAAC (SEQ ID NO: 720)	AACAGATCTGGTCTaCCT (SEQ ID NO: 735)	AGATCTGGTCTgCCTC (SEQ ID NO: 750)
8060	GCTATTGAATGGATGTGCCTTATTT (SEQ ID NO: 706)	TGCATGGCATCAGCATATGTT (SEQ ID NO: 721)	CCCACCTGGaGAAT (SEQ ID NO: 736)	TCCCACCTGGgGAA (SEQ ID NO: 751)
8816	CAGCCCCTCTGCTCCAAG (SEQ ID NO: 707)	TCCCCCTCTGTCCAGGC (SEQ ID NO: 722)	TGAGAAAAAAGgTTCCG (SEQ ID NO: 737)	CTGAGAAAAAAGcTTC (SEQ ID NO: 752)
10600	GGTGACGTTTGCGCATCTC (SEQ ID NO: 708)	AAGTTAATCAAGCCTTTTCAATTGG (SEQ ID NO: 723)	TGCTCAGGAtAGCC (SEQ ID NO: 738)	TGCTCAGGAcAGCC (SEQ ID NO: 753)
10771	CTGGGCCCACCGAGTTAC (SEQ ID NO: 709)	GATCTCTGTGAGTGTGCGTCTGT (SEQ ID NO: 724)	AGGAAGcGTGGCCT (SEQ ID NO: 739)	CAAGGAAGgGTGGC (SEQ ID NO: 754)
10948	ACATTCCCCTTCCACGCTT (SEQ ID NO: 710)	GCAGGGCAGAGGGAGGA (SEQ ID NO: 725)	CGCCCAGTAATaCAGA (SEQ ID NO: 740)	CCCAGTAATcCAGACAC (SEQ ID NO: 755)
11001	GCCATCCTTGTTGAACGTGAA (SEQ ID NO: 711)	ACATGACCAGGGCCCACTT (SEQ ID NO: 726)	TCGTTCCAcTGGACGT (SEQ ID NO: 741)	TTCCAtTGGACGTCCT (SEQ ID NO: 756)
11073	GAGCAACAGCCGCCTGAG (SEQ ID NO: 712)	GCGGGAGCTAGAGAGCAGTG (SEQ ID NO: 727)	TCGGCGCTgGTC (SEQ ID NO: 742)	TCTCGGCGCTcGT (SEQ ID NO: 757)
11248	GAAAGCTAACTCCCCTGACG (SEQ ID NO: 713)	TGAAGGGTAAGGGAGGGAAA (SEQ ID NO: 728)	CTTGGCgTCGCGTC (SEQ ID NO: 743)	TTGGCaTCGCGTCAG (SEQ ID NO: 758)
11654	AGTTTGTTTTCCTATTAGAGGTTTCCA (SEQ ID NO: 714)	CTCTTATGCCTTCCCCACCA (SEQ ID NO: 729)	TTGAAAGGACACCaTATT (SEQ ID NO: 744)	ACACCgTATTTTTCAC (SEQ ID NO: 759)
11655	CATATTCAAGAAAGATTATCTCCAACTCTT (SEQ ID NO: 715)	TGGAAACCTCTAATAGGAAAACAAACT (SEQ ID NO: 730)	CACTAAAGCTGTaATATTA (SEQ ID NO: 745)	CTAAAGCTGTcATATTAC (SEQ ID NO: 760)
13191	GAGTTGGTGGCATAAAACCCTAA (SEQ ID NO: 716)	CCTGTCCCCACCTTCTCTCTCT (SEQ ID NO: 731)	TCTTCCTCTGgGTAACA (SEQ ID NO: 746)	TCCTCTGaGTAACAAC (SEQ ID NO: 761)